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Unusual Specimen of *Petroscirtes ancyloodon* Rüppell from Eilat with Remarks on Blenniid Fish Depth Distributions (Pisces: Blenniidae)

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With 2 figures and 1 table

Summary

A specimen of *Petroscirtes ancyloodon* Rüppell, 1838 was collected near Eilat, northern Red Sea. The specimen is of an unusually large size, and was living at an unusually great depth of 67 m on a sandy bottom, burying in the sand when threatened. Species of the family Blenniidae living at a depth of 25 m or more are summarized.

Zusammenfassung

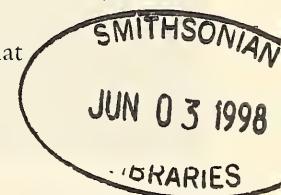
Im Roten Meer bei Eilat wurde ein Exemplar von *Petroscirtes ancyloodon* Rüppell, 1838 gesammelt, das die bisher bekannte Totallänge dieser Art weit überschreitet, die Tiefenverbreitung mit 67 m weit unterschreitet und neue Erkenntnisse hinsichtlich der Ökologie dieser Art bringt. Es wird eine Übersicht der Arten der Familie Blenniidae gegeben, die tiefer als 25 m leben.

1. Introduction

The blenniid fish species *Petroscirtes ancyloodon* has been revised thoroughly by SMITH-VANIZ (1976: 50–51). SMITH-VANIZ examined 90 specimens, with the maximum total length in females 78.6 mm, in males 91.5 mm. About the biotope in which nemophine blennies live he stated (p. 24–25):

“Most species of *Petroscirtes* are usually found near cover, often in the immediate vicinity of grass beds (*Thalassia* or *Zostera*) or floatsam such as *Sargassum*. *P. mitratus* and, especially *xestus* seem to prefer sandy bottom habitats and frequently occupy empty pelecypod shells. The deepest collection of a species of *Petroscirtes* was 18 meters but most collections have come from depths shallower than five meters.”

No observations of specimens burying in the sand have been made for species of *Petroscirtes*. SMITH-VANIZ just refers to MASUDA et alii (1979) who reported that



Xiphasia setifer Swainson, 1839, another species of the tribe Nemophini, buries in the sand if threatened.

An extraordinarily large specimen of *Petroscirtes ancyloodon* was collected by the junior author in the northern Red Sea at a very unusual depth of 67 m. This specimen is described in the present paper; remarks on the depth distribution of blenniid fishes are added.

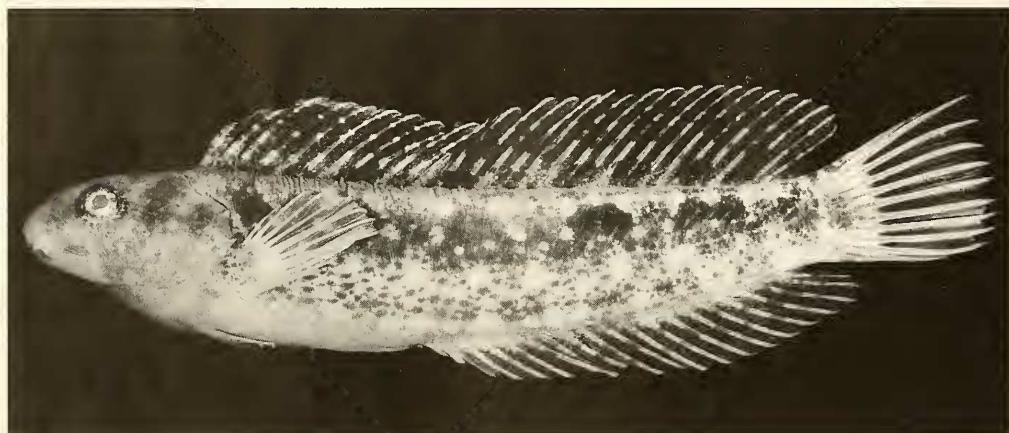


Fig. 1. *Petroscirtes ancyloodon*, male, total length 132.0 mm, Red Sea, Gulf of Eilat.

2. *Petroscirtes ancyloodon* Rüppell, 1838 (Fig. 1)

Material: SMNS 14304, 1 male, 106.5 mm SL, 132.0 mm TL, Red Sea, Gulf of Eilat/Aqaba, 6 km SW Eilat city centre, south of the Underwater Observatory, 29°29' N 34°56' E, 67 m depth, leg. A. MIROZ.

Description: Head length 28.7 mm; head depth 21.0 mm; preorbital 7.4 mm; eye diameter 5.7 mm; interorbital 9.7 mm.

Dorsal fin with XI, 19 elements, not indented between spinous and segmented portions. Anal fin with II, 19 elements, with unsegmented elements distally flattened and segmented elements with distal knobs. Anal fin beginning below 1st segmented dorsal fin ray. Pectoral fin rays 14/14, fin reaching back to level of 10th dorsal fin spine. Pelvic fin I,3/I,2, base beginning below base of 1st or 2nd dorsal fin spine. Caudal fin with 11 unbranched, segmented rays and dorsally and ventrally each three small unsegmented rays. Vertebrae 12 + 22 (including urostyle). Premaxillary with 35 incisiform teeth, dentary with 38 teeth. A single small caniniform tooth in the premaxillary, a large in the dentary. Vomerine teeth lacking.

Branchial opening restricted to the side of the head, ventrally not reaching the pectoral fin base. Head lateral line pores: nasal pores 4, interorbital pores 4, circumorbital pores 9/10, supratemporal pores 5. Canalis lateralis consisting of 8 single tubes without branches, caudally reaching level of 11th dorsal fin spine. Head with one pair each of symphyseal-mandibular, orbital, postorbital, nuchal, posttemporal and preopercular tentacles (Fig. 2).

Behaviour: When the diver approached this specimen, it buried vertically in the sand to a depth of twice its standard length.

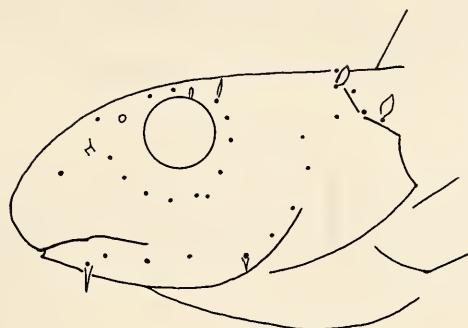


Fig. 2. *Petroscirtes ancylodon*, pores of the head lateral line system and head tentacles.

3. Depth distribution of blenniid fishes below 25 m

Blenniid fish species rarely occur at depths below 25 m. The last paper on the depth distribution was by SPRINGER & SMITH-VANIZ (1970). As no recent findings were published, depth records of blenniid fishes from 25 m or below are summarized in the following (Tab. 1).

Tab. 1. Depth records of blenniid fishes from 25 m or below.

Tribe/Species	Depth [m]	No. spec.	Reference
Tribe Blenniini:			
<i>Blennius ocellaris</i> Linnaeus, 1758	26	1	HELDEN & WIRTZ (1985)
	50–100	36	HELDEN & WIRTZ (1985)
	100–365	13	HELDEN & WIRTZ (1985)
	366–439	1	HELDEN & WIRTZ (1985)
<i>Blennius normani</i> Poll, 1949	20–50	3	HELDEN & WIRTZ (1985)
	50–100	44	HELDEN & WIRTZ (1985)
	more than 100	3	HELDEN & WIRTZ (1985)
	60–200	5	BATH & WIRTZ (1992)
<i>Parablennius gattorugine</i> (Brünnich, 1768)	25		BATH, unpublished
<i>Parablennius pilicornis</i> (Cuvier, 1829)	25		BATH, unpublished
<i>Spaniblennius riodourensis</i> (Metzelaar, 1919)	17–32	12	BATH & WIRTZ (1992)
Tribe Parablenniini:			
<i>Bathyblennius antholops</i> (Springer & Smith-Vaniz, 1970)	101–128	1	SPRINGER & SMITH-VANIZ (1970)
Tribe Salariini:			
<i>Ecsenius</i> spp.	30–40		SPRINGER (1988)
Tribe Omobranchini:			
None living deeper than 25 m			SPRINGER & GOMON (1975)
Tribe Nemophini:			
<i>Petroscirtes ancylodon</i>	67	1	present paper
<i>Xiphiasia</i> spp.	25–50		SMITH-VANIZ (1976)
<i>Xiphiasia matsubarai</i> (Okada & Suzuki, 1952)	178	1	SMITH-VANIZ (1976)

Most of the blenniid fish species live in very shallow waters, often in the intertidal zone. Very few live deeper than 25 m.

4. Discussion

The specimen of *Petroscirtes ancyloodon* collected in the northern Red Sea shows that males of that species may reach a total length of 132 mm. Formerly, only males up to 91.5 mm total length were known.

In spite of former observations, *P. ancyloodon* does not depend on the nearby presence of a hard shelter. The species may live over sandy bottom and may bury in the sand if threatened.

The specimen was also collected at a very unusual depth, much deeper than any other species of the genus *Petroscirtes* collected before. It would seem important to search for blennies more carefully at greater depths.

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